

ASSUMPTIONS OF NORMALITY

2018 FRUIT
ARTHRO-
POD PEST
REVIEW
(Art
Agnello,



Entomology, Geneva; ama4@cornell.edu)

❖❖ This has been another one of those dual-personality growing seasons that New York does so well, and which never fail to irritate those of us who continue to expect the weather to deliver something gradual, normal, not extreme, unremarkable, etc., even though it rarely does so. To start out, the spring took a very long time in arriving, making even the people who are most averse to early warmups show signs of boredom waiting for the trees to start moving. Most of the state reported the latest green tip date on record; it wasn't reported in Geneva until April 30, at which time the degree day accumulations were barely half of the long-term average values. Not until the first week of May did the cold and rainy pattern break somewhat to start pushing moths into the air, and by mid-month there were enough erratic temperature jumps to induce bloom in most tree fruit plantings around the state. June continued the trend of normal- to above-normal temperatures, with sporadic showers failing to prevent a distinct drying out phase, so that most of the state was in moderate drought conditions by the end of the month. Periods of high temperatures and low rainfall persisted through most of July, until finally succumbing to the late-summer pattern of pop-up thunderstorms and muggy heat that continues even now.

The upside of our schizophrenic season was that there was very little in the way of actual drama in either crop or pest development. **Plum curculio** seemed to be addressed adequately and in short order by most growers; outbreaks of **European red mite** appeared to threaten briefly but then did not amount to much. **Obliquebanded leafroller** was again present as usual, but didn't seem to pose many serious problems in most areas. **Oriental fruit moth** and **codling moth**, the traditional drivers of many insect management programs, occurred in generally on schedule and in respectable numbers, continuing to fly at normal and even above-normal levels for the remainder of the season. Their trap numbers even today are impressive for the end of August. First occurrence of **apple maggot** was similarly at a typical timing, thanks to adequate moisture to allow adult emergence from the soil, and continues to be caught at moderate levels in parts of the state. Populations of scale pests, including both **San Jose** and **Prunicola scale**, were noted in several areas of the state, and woolly apple aphid infestations look like they are capable of becoming problematic in mid-late season varieties, particularly in the Hudson Valley.

continued...

IN THIS ISSUE...

INSECTS

- ❖ 2018 Fruit Arthropod Pest Review

GENERAL INFO

- ❖ Cornell Fruit Pest Control Field Days
- ❖ Biocontrols East Conference & Expo

UPCOMING PEST EVENTS

TRAP CATCHES

This seems to have been another notable season for **Japanese beetle**, but 2017's unrelenting assault of **spotted wing drosophila** on tart cherries did not recur this year. Also this season, **brown marmorated stink bug** was unaccountably difficult to find in even the favored Hudson Valley sites where it's been a frequent challenge. Finally, the perennial **black stem borer** ambrosia beetle, a primary or at least secondary cause of tree decline and death in numerous plantings around the state, continues to be found, and this year exhibited a rare high second brood flight. We are still unable to propose a definitive solution for this pest, and the stress caused by abnormal climatic conditions, as well as other elusive factors, continues to make the case for our attention to how easily these trees can become targets for attack. ❖❖

EVENT ANNOUNCEMENTS

CORNELL FRUIT PEST CONTROL FIELD DAYS

& Networking Lunch with Industry

The Cornell Fruit Pest Control Field Days will take place during Labor Day week on Sept. 6-7 this year, with the Geneva portion taking place on **Thursday Sept. 6**, and the Hudson Valley installment on the second day, **Friday, Sept. 7**. Activities will commence in Geneva on the 6th, with registration, coffee, etc., in the lobby of Barton Lab at 8:30 am. The tour will proceed to the orchards to view plots and preliminary data from field trials involving new fungicides, bactericides, miticides, and insecticides on tree fruits and grapes. It is anticipated that the tour of field plots will be completed before noon.

This year, we are inviting all of our Geneva-based graduate students (not just fruit people) to join the tour, to give them an opportunity to observe industry product efficacy in the field, showcasing the latest pest management materials and techniques, and to meet and network with the consultants and agrichemical industry representatives in attendance. Following the field presentations, lunch will be served to all attendees at Barton

Lab. While the field tour will be fruit-oriented, representatives and consultants attend from a wide range of companies and businesses, relevant to many sectors of agriculture. They will each have an opportunity to give a brief overview at lunch about their business and what they look for in prospective employees. This will be an excellent networking opportunity for ALL graduate students.

On Sept. 7th, participants will register at the Hudson Valley Laboratory starting at 8:30, after which they will view and discuss results from field trials on apples and other fruit crops. No pre-registration is required for either event.

BIOCONTROLS USA EAST CONFERENCE & EXPO

Rochester Riverside Hotel

Rochester, NY - October 11-12, 2018

Industry experts will lead you through the latest biological control strategies and products that growers are using to succeed during workshops, tours, and educational sessions devoted to the challenges and opportunities specific to the Northeast region. Full agenda available at:

BiocontrolsConference.com.

scaffolds

is published weekly from March to September by Cornell University—NYS Agricultural Experiment Station (Geneva) and Ithaca—with the assistance of Cornell Cooperative Extension. New York field reports welcomed. Send submissions by 2 pm Monday to:

scaffolds FRUIT JOURNAL
Dept. of Entomology
NYSAES, Barton Laboratory
Geneva, NY 14456-1371
Phone: 315-787-2341
FAX: 315-787-2326
E-mail: ama4@cornell.edu

Editor: A. Agnello

This newsletter available online at:
<http://www.scaffolds.entomology.cornell.edu/index.html>

INSECT TRAP CATCHES (Number/Trap/Day)								
Geneva, NY				Highland, NY				
	8/17	8/20	8/27		8/13	8/20	8/27	
Redbanded leafroller	5.0	1.5	8.0	Redbanded leafroller	9.5	48.0	66.0	
Spotted tentiform leafminer	44.5	23.5	51.5	Spotted tentiform leafminer	114.0	54.5	20.0	
Oriental fruit moth	64.5	52.0	119.5	Lesser appleworm	0.5	1.5	1.0	
Codling moth	45.5	16.5	57.5	Oriental fruit moth	1.0	5.0	3.0	
Lesser peachtree borer	7.5	4.0	8.0	Codling moth	1.5	12.0	8.5	
Obliquebanded Leafroller	0.5	1.0	0.5	San Jose scale	-	134.0	67.0	
Peachtree borer	1.0	0.0	2.0	Obliquebanded leafroller	1.0	0.5	0.0	
Apple maggot	0.7	0.3	0.3	Dogwood borer	3.5	1.0	3.5	
				Tufted apple budmoth	0.0	2.5	12.5	
				Sparganothis fruitworm	0.5	2.5	6.0	
				Apple maggot	10.0	8.3	4.0	

UPCOMING PEST EVENTS		
	43°F	50°F
Current DD* accumulations (Geneva 1/1–8/27):	2993.8	2121.5
(Geneva 1/1–8/27/2017):	2860.9	1911.6
(Geneva "Normal"):	2994.1	2064.0
(Geneva 1/1-9/3, predicted):	3205.3	2284.0
(Highland 1/1–8/27):	3290.4	2352.2
<u>Coming Events:</u>	<u>Ranges (Normal ±StDev):</u>	
Apple maggot flight subsides	2772-3258	1907-2283
American plum borer 2nd flight subsides	2927-3353	2018-2372
Codling moth 2nd flight subsides	2846-3462	1923-2447
Lesser appleworm 2nd flight subsides	2794-3488	1918-2422
Lesser peachtree borer flight subsides	2996-3446	2017-2433
Obliquebanded leafroller 2nd flight subsides	3108-3468	2126-2448
Oriental fruit moth 3rd flight subsides	2928-3412	1978-2310
Redbanded leafroller 3rd flight subsides	3124-3436	2142-2422
*all DDs Baskerville-Emin, B.E.		

NOTE: Every effort has been made to provide correct, complete and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are possible. These recommendations are not a substitute for pesticide labelling. Please read the label before applying any pesticide.

The **Cornell Pest Management Guidelines for Commercial Tree Fruit Production** (aka 'The Recommends') is available from the Cornell Store, both in a printed book format as well as online; visit <https://ipmguidelines.org/> for purchasing details.

This material is based upon work supported by Smith Lever funds from the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.